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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,638	08/09/2001	Allison J. Tanner	D-16699	4427

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SP-TI-03-1
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EXAMINER

NORDMEYER, PATRICIA L

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 09/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,638

Applicant(s)

TANNER ET AL.

Examiner

Patricia L. Nordmeyer

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-10, 12 and 25-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-10, 12, 27-29, 31 and 33-35 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 25, 26, 30 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 7, 2003 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 4, 7, 30 and 32 rejected under 35 U.S.C. 103(a) as being unpatentable over Shukla et al. (USPN 6,458,275) in view of Thurn et al. (USPN 4,076,550).

Shukla et al discloses a multiwell plate (Column 2, lines 30 – 32) where the sidewalls of the wells are formed from a polymeric material such as polystyrene (Column 2, lines 34 – 36) and the closure mat that forms the bottom wall of the wells is made from an inorganic material such as glass (Column 2, lines 40 – 44). The closure mat is attached to the wells through an adhesive strip, sheet or layer (Column 3, lines 8 – 9). However, Shukla et al. fails to disclose the

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glass being a pyrolyzed glass, an additive that is mixed with the adhesive that interacts with the adhesive, frame and layer in a manner which strengthens a bond between said frame and said layer, the additive being a silane monomer and the additive being 3-(trimethoxysilyl)propyl methacrylate.

Thurn et al. teaches a silane monomer, which is chosen from a variety of compounds including 3-(trimethoxysilyl)propyl methacrylate (Column 5, line 47 to Column 6, line 28), combined with a resin (Column 1, lines 51 – 53) for the purpose of promoting adhesion between different materials including glass and polystyrene (Column 1, lines 46 – 50).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the chosen silane monomer mixed with the adhesive material in Shukla et al. in order to promote adhesion between different materials including glass and polystyrene as taught by Thurn et al.

Regarding the limitations of subjecting the glass to a process to free silanol groups that interact with the silane monomer in said adhesive to further strengthen the bond between said adhesive and said layer, subjecting the polymeric material to a process to create reactive groups that interact with the silane monomer in said adhesive to further strengthen the bond between said adhesive and said frame, the glass being subjected to a pyrolysis process and became pyrolyzed glass and the polymeric material being subjected to a plasma treatment process and became plasma treated polymeric material in claims 1, 3, 4 and 32, the determination of

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patentability for a product-by-process claim is based on the product itself and not on the method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 946, 966 (Fed. Cir. 1985) and MPEP §2113. In this case, the limitation of pyrolyzing, plasma treating and subjecting to a process are methods of production and therefore do not determine the patentability of the product itself. Process limitations are given little or no patentable weight. The method of forming the product is not germane to the issue of patentability of the product itself. Further, when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claim in a product-by-process claim, the burden is on the Applicant to present evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. *In re Brown*, 459 F.2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F.2d 742, 180 USPQ 324 (CCPA 1974).

Regarding claim 30, Shukla et al., as modified with Thurn et al., discloses the claimed invention except for the glass being pyrolyzed glass. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use pyrolyzed glass, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

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4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shukla et al. (USPN 6,458,275) in view of Thurn et al. (USPN 4,076,550) as applied to claims 1 – 4, 7, 30 and 32 above, and further in view of Perlman (USPN 5,858,770).

Shukla et al., as modified with Thurn et al., discloses the claimed multiwell plate formed from polystyrene and glass which is attached by an adhesive containing a silane monomer additive. However, Shukla et al. in view of Thurn et al. fails to disclose the adhesive being a non-cytotoxic adhesive.

Perlman teaches a non-cytotoxic pressure sensitive acrylic adhesive material (Column 10, lines 4 – 6) on a sealing membrane for a cell culture plate (Column 9, lines 5 – 13) for the purpose of maintaining a sterile environment in the cell culture (Column 7, lines 27 – 30).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided non-cytotoxic adhesive in Shukla et al. in order to maintain a sterile environment in the cell culture as taught by Perlman.

5. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shukla et al. (USPN 6,458,275) in view of Thurn et al. (USPN 4,076,550) as applied to claims 1 – 4, 7, 30 and 32 above, and further in view of Merz et al. (USPN 4,871,590).

Shukla et al., as modified with Thurn et al., discloses the claimed multiwell plate formed

from polystyrene and glass which is attached by an adhesive containing a silane monomer additive. However, Shukla et al. in view of Thurn et al. fails to disclose the adhesive containing a 3-(mercaptopropyl)trimethoxy silane additive.

Merz et al. teach a 3-(mercaptopropyl)trimethoxy silane additive (Column 4, line 30) in a hot melt adhesive (Column 3, lines 17 – 18) for the purpose of forming a moldable adhesive that quickly solidifies.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the 3-(mercaptopropyl)trimethoxy silane additive in the modified Shukla et al. in order to form a moldable adhesive that quickly solidifies as taught by Merz et al.

6. Claims 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shukla et al. (USPN 6,458,275) in view of Thurn et al. (USPN 4,076,550) as applied to claims 1 – 4, 7, 30 and 32 above, and further in view of Boyce et al. (USPN 4,284,542).

Shukla et al., as modified with Thurn et al., discloses the claimed multiwell plate formed from polystyrene and glass which is attached by an adhesive containing a silane monomer additive. However, Shukla et al. in view of Thurn et al. fails to disclose the adhesive containing a tris2-(methoxyethoxy)vinyl silane additive.

Boyce et al. teach a tris2-(methoxyethoxy)vinyl silane additive (Column 7, line 6) in a hot melt adhesive (Column 1, lines 12 – 13) for the purpose of forming an adhesive that is stable at high temperatures.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided tris2-(methoxyethoxy)vinyl silane additive in the modified Shukla et al. in order to form a moldable adhesive that quickly solidifies as taught by Boyce et al.

Allowable Subject Matter

7. Claims 8 – 10, 12, 27 – 29 and 33 - 35 are allowed as the combination of plasma treated polymeric material in combination with pyrolyzed glass in a multi-well plate overcomes the prior art of record.

8. Claim 31 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

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Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Nordmeyer whose telephone number is (703) 306-5480. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (703) 308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Patricia L. Nordmeyer
Examiner
Art Unit 1772

pln
/pln


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

9/29/03